Response to

Comments by Beekhuizen et al. on " Exposure Assessment of Mobile Phone Base Station Radiation in an Outdoor Environment Using Sequential Surrogate Modeling"

S. Aerts[1]*, D. Deschrijver[1], W. Joseph[1], L. Verloock[1], T. Dhaene[1], and L. Martens[1]

[1] Department of Information Technology

Ghent University / iMinds

Gaston Crommenlaan 8 Box 201, B-9050 Ghent, Belgium

* Corresponding author:

E-mail: sam.aerts@intec.ugent.be

Tel.: +32 9 33 14908

Fax: +32 9 33 14899

The main objective of the study in Aerts et al. [2013a] is to conceptualize a new measurement-based methodology for the experimental assessment of RF-EMF exposure in a small to moderately sized outdoor environment. A key strength of the approach taken in Aerts et al. [2013a] is that no prior knowledge is needed about the environment (e.g., accurate location or antenna information of the base stations and transmitters, and building characteristics). In many cases, such information is not available and/or its reliability can not be verified. Within this scope, the work of Aerts et al. [2013a] is innovative, and offers competitive results when compared to more sophisticated models.

In those cases where additional information is available, it becomes possible to deal with larger areas, and to assess also temporal changes and vertical exposure using 3D simulation models. To this end, the work of Bürgi et al. [2008] has also been cited multiple times in Aerts et al. [2013a]. In fact, the availability of this additional information could also be exploited by the sequential surrogate model (SSM) approach in Aerts et al. [2013a], as to further reduce the cost of the overall measurement procedure.

Finally, it is noted that the comments of Beekhuizen et al. [2013] do not invalidate the methodology nor any of the results presented in the work of Aerts et al. [2013a]. In fact, in a recently accepted paper [Aerts et al., 2013b], we have demonstrated the validity of the SSM approach in a moderately sized outdoor environment (approximately 1 km^2).

References

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